

Fort Mifflin, Smith's Shop
Mud Island
Marine and Penrose Ferry Road
Philadelphia
Philadelphia County
Pennsylvania

HABS No. PA-1225-H

HABS,
PA,
51-PH/LA,
IIIH-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Reduced Copies & Measured Drawings

Historic American Buildings Survey
Office of Archeology and Historic Preservation
National Park Service
Department of the Interior
Washington, D.C. 20240

HISTORIC AMERICAN BUILDINGS SURVEY HABS No. PA-1225 H

FORT MIFFLIN SMITH'S SHOP

Location: West corner of Fort Mifflin between Artillery Shed and West Magazine, Mud Island, Marine and Penrose Ferry Roads, Philadelphia, Philadelphia County, Pennsylvania.

Present Owner: City of Philadelphia.

Present Use: Historic site museum.

Significance: Built before 1802, the smith's shop may be the oldest structure of the fort.

PART I. HISTORICAL INFORMATION

The smith's shop first appeared on Jonathan Williams' 1802 report described as "the Blacksmith Shop, a brick building, two fires, twenty feet by nineteen" (Dr.245, Sht.6, RG 77, NAB). Because of reports from 1780 which mention extensive smith work, it is possible that the shop was built by that time. On Babcock's 1815 plan, however, the site of the shop is occupied by two frame buildings, one of which may have enclosed this shop (CGM #64). Belin's 1839 plans include the shop relatively unchanged from its present appearance, although with two fireplaces. In 1969, this building was damaged by fire and restored, John M. Dickey, architect. For additional information, see Fort Mifflin History (PA-1225).

Prepared by Alison K. Hoagland
Historian
Historic American Buildings
Survey
Fall, 1979.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The smith's shop is the smallest building of the fort and maintains the simplicity of the other structures.
2. Condition of fabric: Excellent.

Description of Exterior:

1. Over-all dimensions: This one-story structure is two bays wide, 22'-8", by 19'-3".
2. Foundations: Rubble stone.
3. Wall construction, finish and color: The 13" thick red brick walling laid in common bond with a header course every eighth course has traces of whitewash.
4. Structural system: Approximately 4'-0" long and 2'-2" on center, 2 3/4" x 7 1/2" outlookers, which provide support for the eaves and the 3" x 5" rafters, span the load bearing walls and are mortised into 3 3/8" x 10 1/4" longitudinal joists. Two equally spaced transverse joists tie the roof structure together at the ceiling line.
5. Porches: Modern brick steps are located at each entry.
6. Chimneys: At each end of the structure a brick chimney, constructed flushly with the exterior surface of the walling, is centered on the ridge. The chimneys have two-course corbeled caps and one drip course.
7. Openings:
 - a. Doorways and doors: At the front and rear elevation the doorways with interior wood lintels have plain frames with mortise and tenon and pegged joints. Board and batten doors with diagonal braces are hung with wrought iron strap hinges on pintles driven into the frames. Rim locks secured the doors.
 - b. Windows and shutters: Adjacent to each doorway is a vertical opening with a plain sill and center mullion flushly set within an ovolo backband trimmed frame. The windows were hung with two-

over-two-light sashes, fragments of which remain. Each sash opening has a board and batten shutter hung with offset wrought iron strap hinges on pintles. Without masonry arches, the frames carry the exterior brick work and wood lintels carry the interior brick work.

8. Roof:

- a. Shape and covering: The gabled roof is covered with new wood shingles laid over narrow, spaced roofing boards which are contiguous at the eaves and at rakes where they are applied parallel to the rafters.
- b. Cornice and eaves: A boxed cornice extends under the eaves and at the end elevations has returns which receive the full rake cornice. In profile, the cornice, which has modern moldings, has a cyma recta-cavetto crown molding and an ovolo-cavetto bed molding below the corona.

Description of Interior:

- 1. Floor plan: Single space with a partial loft.
- 2. Flooring: Set in a herringbone pattern, the brick floor is laid over sand and rubble fill.
- 3. Wall and ceiling finish: The roof structure is exposed and the brick walling retains traces of whitewash.
- 4. Special features: At the northeast wall four posts, which extend from the floor to the joist height and are spaced approximately 5' apart, are each set with a row of iron pins approximately 1' on center. Near the south corner two posts set with a horizontal wooden bar approximately 4' above the floor supported the bellows.

5. Mechanical equipment: Centered on the southwest wall is a brick forge which has a free standing brick flue that corbels to the ridge chimney. The ridge chimney of the opposite wall, probably for a second forge, terminates with corbelling within the attic space.

D. Site and Surroundings:

Located at the west corner of the parade, the Smith's Shop lies between the West Magazine (HABS No. PA-1225-G) to the northeast and the Artillery Shed (HABS No. PA-1225-B) to the southwest. Between the Magazine and the Smith's Shop, the brick drain extends diagonally across the axis to the Northwest Sally Port or postern to a culvert under the northwest rampart. A splash block and gutter at the east corner of the Smith's Shop connects to the drainage system.

Prepared by Rodd L. Wheaton
Architect
Historic American Buildings
Survey
Spring, 1974.

PART III. PROJECT INFORMATION

The Fort Mifflin projects of the Historic American Buildings Survey (HABS) were carried out during the summers of 1969 and 1970 with grants from the Haas Community Funds in cooperation with the Philadelphia Historical Commission, the Independence National Historical Park, and the Shackamaxon Society, Inc. The projects were under the direction of James C. Massey, Chief, HABS. The 1969 survey team was supervised by R. Michael Schneider (Texas A & M University) with student assistant architects Allan H. Steenhusen (Iowa State University), Bruce V.A. Bonacher (Rensselaer Polytechnic Institute), and Malcolm Heard, Jr. (Tulane University). The 1970 survey team was supervised by Allan H. Steenhusen (Iowa State University) with architect Ronald B. Tjerandsen (University of Washington) and student assistant architect John T. Shumate (Carnegie-Mellon University). The drawings were completed in 1971 by

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HABS architect Allan H. Steenhusen and student assistant Tim Wolosz (University of Cincinnati). The drawings were edited in 1972-73 under the direction of John C. Poppeliers, Chief, HABS, by HABS architects Rodd L. Wheaton and John A. Burns with student assistant architect K. Barry Peckham (University of Cincinnati). Historian for the project was A.C. (Gus) Hamblett until 1972. The data was then edited by several members of the HABS staff, including Rodd L. Wheaton, John A. Burns, and Philip Hamp, and completed by Alison K. Hoagland in 1979.